

**WE CLAIM:**

1. A method of improving mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide.
2. The method of claim 1 wherein the polysaccharide is dextran.
3. The method of claim 2 wherein the dextran is administered in admixture with a pharmaceutically acceptable diluent or carrier.
4. The method of claim 3 wherein the diluent is sodium chloride or Ringer solution.
5. The method of claim 2 wherein the dextran is administered to the respiratory tract topically or by aerosol.
6. The method of claim 2 wherein the dextran has an average molecular weight of less than 500,000.
7. The method of claim 2 wherein the dextran has a molecular weight range of about 360 to about 4000.
8. The method of claim 2 wherein the dextran is present in the respiratory secretion at a concentration of about 4 mg/ml to about 40 mg/ml.

9. A method of treating lung disease associated with impaired mucus clearance comprising administering to the respiratory tract of a patient in need of such treatment an effective amount of a polysaccharide.
10. The method of claim 9 wherein the lung disease is cystic fibrosis, chronic bronchitis, bronchiectasis or bronchial asthma.
11. The method of claim 10 wherein the polysaccharide is dextran.
12. A method of improving mucus clearability in a patient having cystic fibrosis comprising administering to the respiratory tract of said patient in need of such treatment an effective amount of dextran.